

-continued

Ser Gly Ser Gly Thr Asp Tyr Thr Phe Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

Glu Asp Ile Ala Thr Tyr Cys Leu Gln Gln Tyr Asp Asn Leu Leu Phe
85 90 95

Thr Phe Gly Gln Gly Thr Lys Leu Gln Ile Thr Arg
100 105

<210> SEQ ID NO 41
<211> LENGTH: 37
<212> TYPE: PRT
<213> ORGANISM: Artificial
<220> FEATURE:
<223> OTHER INFORMATION: afp-1

<400> SEQUENCE: 41

Asn Met Thr Trp Met Glu Trp Asp Arg Glu Ile Asn Gln Tyr Thr Ser
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Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln Glu Lys Asn
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Glu Gln Glu Leu Leu
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<210> SEQ ID NO 42
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The invention claimed is:

1. A CHO cell secreting a heterologous immunoglobulin obtainable with the following method: 40

- a) providing a CHO cell, which is adapted to growth in suspension culture, adapted to growth in serum-free medium, and mycoplasma free, 45
- b) providing a nucleic acid comprising a prokaryotic origin of replication, a first nucleic acid sequence conferring resistance to a prokaryotic selection agent, a second nucleic acid sequence encoding the heavy chain of said heterologous immunoglobulin, and a third nucleic acid sequence encoding the light chain of said heterologous immunoglobulin, 50

whereby a first transfection vector is provided which comprises said provided nucleic acid and an additional fourth nucleic acid sequence conferring resistance to a first eukaryotic selection agent, 55

whereby a second transfection vector is provided which comprises said provided nucleic acid and an additional fourth nucleic acid sequence conferring resistance to a second eukaryotic selection agent, whereby said second eukaryotic selection agent is different to said first eukaryotic selection agent, 60

- b1) providing a nucleic acid comprising a prokaryotic origin of replication, a first nucleic acid sequence conferring resistance to a prokaryotic selection agent, 65

a second nucleic acid sequence encoding the heavy chain of said heterologous immunoglobulin, and/or a third nucleic acid sequence encoding the light chain of said heterologous immunoglobulin,

whereby a third transfection vector is provided which comprises said provided nucleic acid and an additional fourth nucleic acid sequence conferring resistance to a third eukaryotic selection agent, whereby said third eukaryotic selection agent is different to said first eukaryotic selection agent and is also different to said second eukaryotic selection agent,

c) transfecting said CHO cell, wherein said transfecting comprises the following steps in the following order:

- (i) transfecting said CHO cell with said first transfection vector,
- (ii) selecting a CHO cell transfected in (i) by selected growth in cultivation medium containing a first eukaryotic selection agent to which the first transfection vector confers resistance,
- (iii) transfecting said selected CHO cell in (ii) with said second transfection vector,
- (iv) selecting a CHO cell transfected in (iii) by selected growth in cultivation medium containing said first eukaryotic selection agent to which the first transfection vector confers resistance and said second eukaryotic selection agent to which the second transfection vector confers resistance,
- (v) transfecting said CHO cell selected in (iv) with said third transfections vector,